

## **Appendix H:**

### **State Steering Committee Identified Goals, Objectives, Projects and Activities**

## APPENDIX H: MITIGATION PROJECTS – COMPLETE LIST

Note: Redundancy-related strategies and projects are coded in yellow

Continuity of Operations Plans strategies and projects are coded in pink

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
<b>GOAL 1: STRUCTURAL MITIGATION PROJECTS</b>						
<i>Identify and implement physical projects that will directly reduce impacts from hazards</i>						
<i>Objective 1: Continue implementation of warning and detection systems to notify the Commonwealth of impending hazards</i>						
1.1.1	Evacuation Interstate Ramp Barrier Gates	Installation of fixed barriers at interstate ramps that can be manually operated to improve evacuations for needed hazards with limited preparation for mobilization and limited state resources	VDOT	\$580,000	ASAP	Critical
1.1.2	HVAC Systems Protection of Capitol Complex Buildings	Study the feasibility and options to protect HVAC system on critical buildings on the Capitol Square Complex. Develop the design for system modifications at four of the highest risk buildings including Supreme Court, General Assembly and other select facilities	Department of General Services	\$500,000	1 Year	Critical
1.1.3	Real time flood warning system	Construct and instrument stream gages to provide real time flood stage and discharge information to at least 10 underserved priority flood prone communities.	US Geological Survey			High
1.1.4	Reduce Impact of Flooding on Virginia Tech Campus	Coordinate with adjacent locality to evaluate and improve upstream storm water management practices. Evaluate and expand size of underground stream diversion piping system to improve storm water capacity and reduce surface flows. Project would reduce flooding risks for 5 repetitive loss buildings located on a 100-year floodplain and 2 additional structures located on a 500-year floodplain.	Virginia Tech		As funding becomes avail.	Low
<i>Objective 2: Elevate, retrofit and relocate existing structures and facilities in vulnerable locations</i>						
1.2.1	Evaluation of DEQ Buildings for Flooding	Evaluation of DEQ locations to determine if offices and monitoring stations are within 100 year flood zone.	Department of Environmental Quality	\$1,000	1 Year	High
1.2.2	Window and Door Glass Protection	Install 8 mil film with wet glaze attachment on glass windows and doors at 36 State owned National Guard armories throughout the Commonwealth.	Department of Military Affairs	\$356,250	As funding avail.	High
1.2.3	Install fire alarm and sprinkler systems at WSH	Install automatic fire sprinkler and fire alarm systems throughout these buildings	DMHMRSAS	\$21,879,000		Medium
1.2.4	Relocation of VDOF – Big Stone Gap office facility to mitigate recurring flood losses	Relocate the VDOF county office facility in Big Stone Gap, VA. To avoid the problems of recurring flood damage.	Virginia Department of Forestry	\$590,000	As funding avail.	Medium
1.2.5	Replace cottages SEVTC	Replace existing cottages and program center with new buildings that meet code.	DMHMRSAS			Low
<i>Objective 3: Construct hazard resistant buildings and infrastructure</i>						
1.3.1	Improve security of Virginia Tech Power plant and related utility systems	Implement security measures to protect Virginia Tech's Power plant and Chiller Plant. Install security systems within the 5 miles of steam tunnels to monitor/control access.	Virginia Tech		As funding becomes avail.	Medium
1.3.2	Provide emergency power for vulnerable Virginia Tech	Evaluate and install emergency power generators sufficient to maintain critical business and research functions within 38 vulnerable buildings.	Virginia Tech		As funding	Medium

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
	properties				becomes avail.	
1.3.3	Evaluate/retrofit ventilation systems on Virginia Tech campus to minimize vulnerability to terrorism	Evaluate vulnerability of ground-level air intakes, and design and retrofit systems to reduce vulnerability.	Virginia Tech		As funding becomes avail.	Low
1.3.4	Improve fire safety in certain Virginia Tech multi-story buildings	Evaluate 14 existing buildings with unenclosed multi-story stairwells to determine if enclosure of the stairwells and/or sprinkling would assure an adequate level of fire safety; once study is completed, implement retrofits on prioritized basis.	Virginia Tech		As funding becomes avail.	Low
1.3.5	Install fire sprinkler and alarm system at NVTC	These buildings are sited on wooded property in Northern Virginia. This project will install fire sprinkler and fire alarm systems in these buildings.	DMHMRSAS	\$5,522,000		Low
1.3.6	Install fire sprinkler and alarm systems at CVTC	Install fire sprinkler and alarm systems.	DMHMRSAS			Low
1.3.7	Install smoke detection and fire alarms systems in Virginia Tech buildings	Install or expand existing fire detection and alarm systems in 22 Virginia Tech properties.	Virginia Tech	\$3,500,000	As funding becomes avail.	Low
1.3.8	Sprinkler vulnerable buildings on the Virginia Tech campus	Evaluate and install fire suppression systems on a prioritized basis in 10 vulnerable Virginia Tech buildings.	Virginia Tech		As funding becomes avail.	Low
<i>Objective 4: Modify the geographic setting near structures to reduce exposure to hazards</i>						
1.4.1	Install Security Barriers	Install security barriers with automated access control/monitoring systems to protect the Capitol Square accesses and the facilities in Capitol Square.	Department of General Services & VDOT	\$1,000,000	As funding avail.	High
1.4.2	UVA-Wise Utility Replacement	Replace overhead power lines with underground.	UVA-Wise	\$1,000,000	Funding avail.	Low
<i>Objective 5: Require emergency utility systems and redundant communication systems for functionally critical facilities</i>						
1.5.1	Electrical wiring for future emergency generator hook-up	Provide necessary electrical hook-up, wiring, and switches to allow readily accessible connections to emergency generators at 34 State owned National Guard armories throughout the Commonwealth.	Department of Military Affairs	\$204,000	As funding avail.	Critical
1.5.2	Emergency Power Systems for 9 Regional Agency Cooler Facilities	Provide emergency back-up power at 9 of the agencies largest cooler facilities that can be utilized for refrigeration functions associated with the emergency response needs of the Commonwealth. The cooler facilities are already in place and include drive in type facilities for the storage and distribution of tree seedlings during early spring. These sites are generally available for most of the summer and fall seasons, and would allow for multiple tractor-trailer sized cold storage facilities for critical food, health, and ice needs.	Virginia Department of Forestry	\$225,000	As funding avail.	Critical
1.5.3	Supplemental Power for Government Data Centers	Establish a real-time off-site data center for DGS survey of mission critical applications and communications. The center would house a 3 terabyte mass storage device, 2 database servers, 2 email servers, 5 application servers, 2 domain servers, 5 Citrix servers, software and telecommunications circuits required to support real-time fail over capabilities for DGS applications	Department of General Services	\$500,000	1 Year	Critical
1.5.4	Emergency hardware and	Procurement of hardware and software as needed to conduct business in	DMHMRSAS &	\$500,000	As	High

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
	software procurement	the event of an emergency or disaster.	VITA		funding avail.	
1.5.5	Provide uninterruptible power source (UPS) for DCLS	Install an UPS system in the Archive Room located at the Div of Consolidated Laboratory Services and re-feed busway A from the new UPS system.	Department of General Services	\$435,000	As funding avail.	High
1.5.6	Installation of Emergency Power System	Install generator to provide electrical power to regional laboratory facility.	VA Dept of Agriculture and Consumer Services	\$50,000	As funding avail.	Medium
1.5.7	Installation of Emergency Power System	Install generator to provide electrical power to regional laboratory facility.	VA Dept of Agriculture and Consumer Services	\$40,000	As funding avail.	Medium
1.5.8	Installation of Emergency Power System	Install generator to provide electrical power to regional laboratory facility.	VA Dept of Agriculture and Consumer Services	\$50,000	As funding avail.	Medium
1.5.9	Installation of Emergency Power System	Install generator to provide power to regional laboratory facility.	VA Dept of Agriculture and Consumer Services	\$50,000	As funding avail.	Medium
1.5.10	Installation of Emergency Power System	Install generator to provide electrical power to regional laboratory facility.	VA Dept of Agriculture and Consumer Services	\$50,000	As funding avail.	Low
<i>Objective 6: Implement "in place" contracts to provide mitigative measures for functionally critical facilities</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 7: Maintain Continuity of Operation of critical facilities through reduction of hazard impacts on communication networks and information infrastructure</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 8: Gather information on mitigation effectiveness</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<b>GOAL 2: POLICY, PLANNING &amp; FUNDING</b>						
<b>Incorporate mitigation concepts and objectives into existing and future policies, plans, regulations and laws in the Commonwealth</b>						
#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
<i>Objective 1: Identify current policies, plans, regulations and laws that require or should require mitigation intervention</i>						
2.1.1	Development of Statewide Hosting Program	Developing a statewide hosting plan by identifying a number of specific facilities that can be designated as "all hazard" reception shelter centers throughout the Commonwealth near major traveled routes where citizens can seek shelter and/or get information on the nearest shelter facility. These facilities can be clearly identified in statewide plans and established as a uniform basis for safe evacuation locations depending upon the hazard at hand.	Virginia Department of Emergency Management			Critical
2.1.2	Sensitive Data protection	Identify source data (hazard or community/state facility data) that may need FOIA protection and establish standards, criteria and regulatory protections for use of and access to these data.	VDEM		3 Years	Critical
2.1.3	Continuity of Operations	Develop a Continuity of Operations Plan (COOP) that establishes	Agriculture &	\$2,000	< 1 Year	High

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
	Planning	procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Consumer Services			
2.1.4	Hazard Mitigation Planning	Perform a hazard/vulnerability assessment of buildings and infrastructure on the Radford University campus.	Radford University	\$100,000	As funding avail.	High
2.1.5	Hazard Mitigation Planning	Perform a hazard/vulnerability assessment of buildings and infrastructure on the Virginia State University campus.	Virginia State University	\$100,000	As funding avail.	High
2.1.6	Hazard Mitigation Planning	Perform a hazard/vulnerability assessment of buildings and infrastructure on the Norfolk State University Campus	Norfolk State University	\$100,000	As funding avail.	High
2.1.7	Jamestown Settlement Electrical Surge Protection	Provide electrical surge protection to computers, sensitive audio/visual equipment and to interactive exhibits. Protection would be extended to the Education, Visitor Services and Theater/Special Exhibitions Wings.	Jamestown-Yorktown Foundation	\$172,500	As funding avail.	High
2.1.8	Jamestown Settlement Emergency Generators	Upgrade generators for the following buildings: Education Wing from 20KW to 300KW Natural Gas; Visitor Services Wing from 50KW to 300 KW Natural Gas; and relocate existing 50KW generator from Visitor Services Wing to the Maintenance Building.	Jamestown-Yorktown Foundation	\$562,500	As funding avail.	High
2.1.9	Development of a Plant Pest Emergency Action Plan	Development of a Plant Pest Emergency Action Plan by the Office of Plant and Pest Services (OPPS). OPPS cooperates with state, federal and local agencies and industries to protect Virginia's agricultural and horticultural interests from plant pests and diseases. This plan would enhance emergency action coordination, communication, survey and sample analysis, regulatory/quarantine response.	VA Dept of Agriculture & Consumer Services & VDACS		2005	Medium
2.1.10	Yorktown Victory Center Surge Protection	Provide electrical surge protection to building electrical system to protect sensitive, expensive computer and audio/visual equipment.	Jamestown-Yorktown Foundation	\$57,500	As funding avail.	Medium
2.1.11	Yorktown Victory Center Emergency Generator	Upgrade existing 20 KW diesel generator to a 480 KW natural gas generator.	Jamestown-Yorktown Foundation	\$290,000	As funding avail.	Medium
2.1.12	Jamestown Settlement Tree Trimming and Removal	Selectively trim healthy trees and remove damaged limbs and/or trees from site.	Jamestown-Yorktown Foundation	\$20,000	As funding avail.	Low
2.1.13	Yorktown Victory Center Tree Trimming	Selectively trim healthy trees and remove damaged limbs and/or trees from site.	Jamestown-Yorktown Foundation	\$20,000	As funding avail.	Low
2.1.14	Hazard Mitigation Planning (Pre-Disaster Mitigation Grant Program, Disaster Resistant University Grant)	Perform a hazard/vulnerability assessment (e.g., fire, flooding, power/heat/cooling production and distribution, emergency power, protection of critical/irreplaceable stocks/materials, terrorism, etc.) of buildings and infrastructure on the local Virginia Tech Campus.	Virginia Tech, CGIT & VDEM	\$100,000	Ongoing	
<i>Objective 2: Add hazard assessment to new, remodeled and relocated facilities</i>						
<b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 3: Incorporate mitigation planning concepts into COOP and recovery plans for state agencies</i>						
2.3.1	State Agency COOP Planning	As per Governor's Executive Order, all state agencies are required to develop a Continuity of Operations Plan (COOP)	All State Agencies		Ongoing	Critical
2.3.2	State Agency COOP Implementation	Develop processes and procedures for the prioritization and management of the concurrent implementation of multiple agency COOPs due to a	VDEM, All State Agencies		Ongoing	Critical

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
		regional disaster and/or emergency.				
2.3.3	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	VA Dept of Agriculture & Consumer Services	\$2,000	< 1 Year	Critical
2.3.4	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	VA Dept of Agriculture & Consumer Services	\$8,000	< 1 Year	Critical
2.3.5	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.6	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.7	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.8	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.9	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.10	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.11	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.12	Continuity of Operations Planning	Develop a Continuity of Operations Plan (COOP) that established procedures and responsibility for resumption of Agency mission critical functions after occurrence of a disaster or disruptive event.	Agriculture & Consumer Services	\$2,000	< 1 Year	High
2.3.13	Incorporation of Continuity of Operations Planning	Incorporation of relevant state agency Continuity of Operations Plans (COOP) information into the 2007 Hazards Mitigation Plan.	VDEM & PPF subcommittee		2007	High
<i>Objective 4: Standardize the critical facility definition across the Commonwealth NO PROJECTS ENTERED FOR THIS OBJECTIVE</i>						
<i>Objective 5: Incorporate mitigation planning concepts into state legislation and zoning</i>						
2.5.1	Encourage use of Hazard Assessment data from this EOP to update other state plans	Work with Governor's office and various state Secretary's to incorporate the results of this State Hazard Mitigation Plan into state agency COOPs, other EOP assessments, etc., as needed.	VDEM		5 Years	Critical
<i>Objective 6: Promote coordination between federal, state and local organizations</i>						
2.6.1	Develop a Family of Public Health Emergency	Develop a family of All Hazard, Public Health Emergency Preparedness and Response Plans	Virginia Department of	\$57,000,000	Annually updated	Critical

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
	Preparedness and Response Plans		Health		based on grant cycles	
2.6.2	Legislative support to incorporate hazard mitigation planning into local comprehensive planning process	Work with Governor's office, state Secretary's and General Assembly to incorporate the hazard mitigation planning process into the local comprehensive planning process, thus working to solidify these principles and methods into planning at the local level.	VDEM, Governor's Office and General Assembly		5 Years	Critical
<i>Objective 7: Perform a hazard mitigation analysis on all current and potential Commonwealth leased properties</i>						
<b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 8: Identify appropriate funding sources</i>						
2.8.1	Comprehensive State Agency Grants Database Development	Identify the basic information about all state agency grant and funding programs. Place this information into a comprehensive, online, keyword-searchable database for use by localities and other state agencies to identify other funding sources for mitigation projects.	VDEM		Ongoing	
<b>GOAL 3: INFORMATION AND DATA DEVELOPMENT</b>						
<b>Build capacity with information and data development to refine hazard identification and assessment, mitigation targeting and funding identification</b>						
#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
<i>Objective 1: Identify data needs and sources</i>						
3.1.1	Climate and Natural Hazard Information Collection	Assist VDEM, in conjunction with Virginia State Climatologist's office, in obtaining comprehensive, high quality and most appropriate data for natural hazards that impact Virginia. Sources will include the NCDC, regional climate centers and NWS offices serving Virginia.	NOAA & National Weather Service			Critical
3.1.2	Establish and Maintain the Virginia Hazard Mitigation Database	Establish, develop and maintain a system by which Virginia-specific hazards data can be consolidated and made available to all localities and agencies for use. ID, compile, and map the general Virginia "inventory" data needed to better assess the Commonwealth's general vulnerability to all hazards. This would include demographic, business/industry, agricultural and natural environment data. Discrete weather data would include data on Winter Storms, Hail, Extreme Temperature, Drought, Hurricanes, Tornadoes, Lightning, Land Subsidence, Karst regions, Flooding and Earthquakes. Database will also be used to consolidate local data and results into state plan once available. Local entities information and data would be incorporated into the database.	VDEM, NOAA, NWS, CGIT, VGIN & VITA		3 Years	Critical
3.1.3	Mitigation: Security of Data & Assets	Critical Organizational exposures include protection of data (financial documents) and of data (financial documents) and protection of other assets (personal and fixed assets).	Virginia Housing Development Authority	\$300,000	By 4 <sup>th</sup> quarter 2004	Critical
3.1.4	Real time flood inundation mapping program	Develop high resolution flood plain maps and hydraulic models to produce real time flood inundation maps for high priority locations within Virginia.	US Geological Survey			Critical
3.1.5	Comprehensive Dam Information Database Development	Identify and convene committee to identify, coordinate and collect relevant data for use in a single comprehensive database of ALL dams located in or affecting the Commonwealth of Virginia.	VDEM & DCR		2 Years	High
3.1.6	Dam Inundation Areas Mapping and Risk	Identify and implement a method to map and assess the hazards of dam inundation areas in the Commonwealth of Virginia. Will require	VDEM & VDCR		3 Years	Medium

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
	Assessment	protection of sensitive data as completed.				
3.1.7	Produce an Accurate and Highly Detailed Map of Virginia's Karst	If provided with sufficient additional resources, the VA DCR karst program could produce a detailed map of Virginia's karst, perhaps on conjunction with the VA Dept of Mines Minerals and Energy Division of Mineral Resources and the United States Geological Survey.	Virginia Department of Conservation & Recreation	\$200,000		Medium
3.1.8	Delineation of Watersheds & Recharge Areas for Karst Aquifers in VA and Compilation of GIS-based Comprehensive Karst Hydrology for Virginia	The VA DCR Karst Program is engaged in a project to delineate watersheds and define recharge areas for karst aquifers in VA. A GIS-based VA Karst Hydrology Atlas is being completed detailing karst groundwater dye tracing investigations. The current Karst Program dye tracing work is to produce data to provide a hydrologic basis for defining conservation site boundaries for VA's significant caves. Given significant resources, it would be desirable to perform hydrologic investigations including extensive groundwater dye tracing throughout VA's karst areas. If it was available, knowledge of underground flow paths would be invaluable information for planning and for emergency services personnel in the event of a hazardous material event in VA's karstlands.	Virginia Dept of Conservation & Recreation	\$150,000		Low
3.1.9	Hazard Mitigation	Virginia Department of Fire Programs (VDFP) is responsible for the delivery fire of fire and emergency services training to Virginia's Fire Service. VDFP is an Accredited training Agency under the National Board Fire Service Professional Qualifications (NBFSPQ). VDFP is the only accredited entity for Virginia's Fire Service. VDFP provides augmentation to VDEM in the event of an emergency and staffs an aspect of the Virginia Emergency Operations Center @ VDEM. Emergencies may include fires, natural disasters, hazardous materials spills, floods, hurricanes and other emergency related events.	Virginia Department of Fire Programs & Virginia Department of Fire Programs Incident Management Systems	\$5,000,000	Ongoing	
<i>Objective 2: Identify data analysis methods</i>						
3.2.1	Human-caused hazards assessment methods development	Identify and implement at the state and local levels validated assessment methods for human-caused hazards.	VDEM		3 Years	Critical
3.2.2	Update 100 and 500 year flood frequency statistics	Update 100 and 500 year flood frequency statistics using most current information to estimate the magnitude and frequency of peak flood discharges.	US Geological Survey			High
3.2.3	Camera Security Systems	Provide and maintain a camera security system with digital recording capability and internet based monitoring system for critical Capitol Service facilities. Provide training for Capitol Police and staff to monitor the camera captured activity.	Department of General Services	\$250,000		Low
3.2.4	Community Inventory Assessment Methods	Work with localities to develop a semi-standardized database for identifying and tracking community assets, including critical and non-critical facilities. This data would be identified first and then a phased implementation program initiated to support collection of this data at the local level.	VDEM, VITA, VGIN & Commonwealth localities		10 Years	Low
<i>Objective 3: Develop strategies to convert data to information for decision-making</i>						
3.3.1	State Hazard Mitigation Website Maintenance	Maintain and develop a website or sub-site from VDEM to provide current information and data about the state and local hazard mitigation process. This site should include information related to local efforts, state efforts, links to hazard assessment data and methods and state and FEMA guidance on the mitigation planning process generally.	VDEM & CGIT		6 Months	Critical



#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
3.3.2	Provide field level GIS capabilities to support emergency incident response and mitigation	Expand agency GIS capabilities to 18 county office locations to support emergency response assessment and informational needs. The agency has already developed an internet based mapping utility (ForestRIM) that relies on agency GIS data layers. This utility has proved invaluable during emergency incidents to provide location and resource information, as well as for the production of planning related maps and documents. Currently this utility is only available at 6 Regional office locations. This project will allow expansion of the program to include an additional 18 sites across the Commonwealth, which will facilitate increased local use of the product for all cooperating agencies.	Virginia Depart of Forestry & VDEM	\$178,000	As funding avail.	Medium
3.3.3	Floodplain Management Plan	Develop a comprehensive plan/approach to update local flood maps into digital format using recent data and methods.	VDEM, VDCR & Commonwealth localities		Ongoing	
3.3.4	Update Repetitive Loss Property lists As Needed	Work with FEMA NFIP to update Repetitive Loss Property lists annually.	VDEM & DCR		1 Year Ongoing	
<i>Objective 4: Identify mitigation analysis strategies</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 5: Develop a common system for information storage</i>						
3.5.1	Incorporation of Handheld GIS-based Data Collection into Emergency Response	Acquire and utilize handheld field data recorders to facilitate emergency response information collection & distribution. This project will expand existing agency GIS capabilities to provide a much more efficient method for recording incident information in support of assessment and planning roles. This project will provide county level VDOF personnel with handheld data collectors and the training will allow for real-time data collection in a digital format to expedite local damage assessments and to provide GIS based information that is critical for incident response. This expands DOF's existing state of the art GIS capabilities making it more available to support the Commonwealth's emergency response needs.	Virginia Department of Forestry	\$395,000	As funding avail.	Critical
3.5.2	Comprehensive State Facility Inventory Database	Enhance and consolidate the existing state facility databases into a single database. Issues to address would be types of facilities to include and the data to collect on each to meet the needs of the respective parties to this effort. Develop and implement the database, including implementation of strategies to have state agencies be responsible for maintaining their own data.	VDEM, CGIT & DGS		3 Years	High
<i>Objective 6: Develop data distribution standards for the mitigation database to address, sharing and FOIA issues</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<b>GOAL 4: EDUCATION &amp; OUTREACH ACTIVITIES</b>						
<b>Through education and training, increase awareness of hazards and potential mitigation strategies</b>						
#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
<i>Objective 1: Evaluate impact of ongoing educational efforts to determine unmet needs</i> <b>NO PROJECTS ENTERED FOR THIS OBJECTIVE</b>						
<i>Objective 2 : Identify target audiences in the general public and state agencies for hazards awareness education and training</i>						
4.2.1	Enhanced Statewide Hurricane Public Education Program	Increase the general public's knowledge of disaster preparedness with emphasis on hurricane through an enhanced public education program.	Virginia Department of Emergency Management			Critical
4.2.2	Development of a Business Disaster Guide	Development of a business disaster guide to help business mitigate and	VDEM, Citizens Corps & Chamber	\$25,000		High

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
		prepare for disasters.	of Commerce			
4.2.3	Local training on Hazard Mitigation Planning Process	Establish a consistent program for localities to learn the hazard mitigation planning process using both FEMA and VDEM standards.	VDEM, FEMA III & Commonwealth Localities		1 Year	High
4.2.4	Mitigation Success Stories Development	Develop a simple method to identify and record the ongoing mitigation success stories from across the Commonwealth. Identify the critical information/data needed to show the full benefits of these actions over time.	VDEM		2 Years	High
4.2.5	Web-Based Foreign Animal Disease Training	In cooperation with faculty from the Virginia-Maryland Regional College of Veterinary Medicine, develop a web-based foreign animal disease-training course for veterinary practitioners and others. Training is designed to refresh practitioners on the clinical features of foreign animal disease. The training will also introduce veterinarians to important aspects of the Commonwealth's emergency response plan. Practitioners would receive continuing education credits for successfully completing the training course.	VA Dept of Agriculture & Consumer Services	\$10,000		Medium
4.2.6	Local training on Updated Hazard Assessment methods	Identify updated and effective hazard assessment methods and develop a method to train localities in their use, either through creation of new training programs or pass-through advertising of existing programs.	VDEM, FEMA III & Commonwealth Localities		Ongoing	
<i>Objective 3: Identify and develop resources to provide training and education to targeted audiences</i>						
4.3.1	Virginia Mitigation Strategies Encyclopedia	Develop a comprehensive and evolving toolkit of potential mitigation strategies that the State and localities may use to address the various hazards that affect them. Include with this toolkit a current assessment of which strategies are currently allowed under Virginia Law.	VDEM, VCU & UVA	\$20,000		Critical
4.3.2	Encourage NFIP participation	Develop and implement an education program for localities and citizens regarding the NFIP program and flood insurance generally.	VDEM & VDCR		3-5 Years	High
4.3.3	Preplanned and Developed Informational Campaigns for Natural Disaster Response	To develop and implement several ready to roll public information campaigns for the common natural disasters that can occur in the Commonwealth. Pre-planned messages and pre-approval PSA's will allow for a faster response to public needs and will help to provide important public information before during and after the event. Information is planned for hurricanes, tornados, flooding, winter storms and wildfire events.	Virginia Department of Forestry	\$145,000	As funding avail.	Medium
4.3.4	Bioterrorism Training for Microbiologists	Increasing awareness and readiness of microbiologists in the VDACS Regional Animal Health Laboratories to recognize and deal with bacterial agents that can be utilized in bioterrorism attacks. This training has come in a variety of modalities, including attendance by one microbiologist from each laboratory at an Association of Veterinary Microbiologists meeting in Charleston, WV, that dealt specifically with bioterrorism agents, attendance by the Program Supervisor at a national food safety conference and training materials for recognition of bioterrorism.	VA Dept of Agriculture & Consumer Services	\$3,035	Ongoing	
4.3.5	Building Emergency Evacuation Program	Develop and distribute internet and compact disk based evacuation plans for all facilities managed by the Department of General Services serving approximately 4.5 million sq. ft. Based on the general structure, the procedures for each building would be customized to meet actual requirements using video and digital picture technology. Evacuation	Department of General Services	\$150,000	Ongoing	

#	PROJECT NAME/ STRATEGY	ACTION	AGENCIES INVOLVED	PROJECT COST	TIME SPAN	RANK
		plans would be web-based and each agency in a facility would receive a CD/DVD version for group training sessions.				
4.3.6	Monitoring Food Security in Meat and Poultry Slaughter and Processing Plants	Virginia Dept of Agriculture Inspectors assigned to meat and poultry slaughter and processing plants throughout the state are notified with the national alert level reaches orange. The inspectors then perform a security check of the facilities to which they are assigned.	VA Dept of Agriculture & Consumer Services		Ongoing	
4.3.7	Newsletter to Virginia Food Industry on Food Security	The Food Safety and Security Program, Office of Dairy and Foods, preparedness distributes a quarterly newsletter to Virginia's food industry. The newsletter addresses issues that should be helpful for the food industry to develop protocols for providing protection of our food supply against terrorists.	VA Dept of Agriculture & Consumer Services	\$20,000	Ongoing	
4.3.8	Train VDEM Divisions in Mitigation Project Development	Train and work with other VDEM programs/divisions to identify and describe potential mitigation projects related to their particular programs, but particularly for human-caused hazard assessments and plans.	VDEM		Ongoing	
4.3.9	Vulnerability Assessments within Food Establishments	The Food and Safety and Security Program, Office of Dairy and Foods, performs vulnerability assessments of food establishments during routine inspections. Vulnerability information is not recorded in writing, but is reported to food establishment operators verbally.	VA Dept of Agriculture & Consumer Services	\$40,000	Ongoing	
<i>Objective 4: Provide hazard awareness, preparedness and mitigation information through various communication channels</i>						
4.4.1	Educate Insurance Industry re: NFIP	Develop, require and implement better training and/or continuing education programs for insurance agents involved in writing and administering NFIP policies.	DCR & State Corporation Commission (SCC)		3 Years	Critical
<i>Objective 5: Create connection between "secure VA" effort with existing agency functions</i> NO PROJECTS ENTERED FOR THIS OBJECTIVE						